

Putnam VT Global Health Care Fund

The fund's portfolio

9/30/22 (Unaudited)

COMMON STOCKS (96.8%)(a)

	Shares	Value
Biotechnology (12.4%)		
AbbVie, Inc.	23,100	\$3,100,251
Alkermes PLC <i>(NON)</i>	91,100	2,034,263
Alnylam Pharmaceuticals, Inc. <i>(NON)</i>	6,380	1,277,021
Ascendis Pharma A/S ADR (Denmark) <i>(NON)(S)</i>	55,120	5,691,691
Biogen, Inc. <i>(NON)</i>	3,600	961,200
Blueprint Medicines Corp. <i>(NON)</i>	15,400	1,014,706
Ironwood Pharmaceuticals, Inc. <i>(NON)</i>	134,083	1,389,100
Sarepta Therapeutics, Inc. <i>(NON)</i>	9,500	1,050,130
Seagen, Inc. <i>(NON)</i>	5,100	697,833
		17,216,195
Health-care equipment and supplies (11.7%)		
Abbott Laboratories	24,400	2,360,944
Boston Scientific Corp. <i>(NON)</i>	116,000	4,492,680
DexCom, Inc. <i>(NON)</i>	42,200	3,398,788
Intuitive Surgical, Inc. <i>(NON)</i>	25,200	4,723,488
Lantheus Holdings, Inc. <i>(NON)</i>	11,800	829,894
Terumo Corp. (Japan)	14,000	395,060
		16,200,854
Health-care providers and services (22.3%)		
Cigna Corp.	24,300	6,742,521
Elevance Health, Inc.	2,200	999,328
Humana, Inc.	5,600	2,717,064
McKesson Corp.	11,500	3,908,505
Option Care Health, Inc. <i>(NON)</i>	92,700	2,917,269
UnitedHealth Group, Inc.	27,400	13,838,096
		31,122,783
Life sciences tools and services (10.2%)		
Bio-Rad Laboratories, Inc. Class A <i>(NON)</i>	3,800	1,585,132
Danaher Corp.	22,800	5,889,012
ICON PLC (Ireland) <i>(NON)</i>	13,400	2,462,652
Thermo Fisher Scientific, Inc.	8,500	4,311,115

14,247,911

Pharmaceuticals (40.2%)

4Front Ventures Corp. <i>(NON)</i>	4,850,921	1,571,213
AstraZeneca PLC (United Kingdom)	77,671	8,541,484
Daiichi Sankyo Co., Ltd. (Japan)	52,700	1,465,950
Eisai Co., Ltd. (Japan)	10,700	573,936
Eli Lilly and Co.	24,800	8,019,080
Innoviva, Inc. <i>(NON)</i>	396,915	4,608,183
Johnson & Johnson	38,926	6,358,951
Merck & Co., Inc.	88,862	7,652,795
Novo Nordisk A/S Class B (Denmark)	43,718	4,357,548
Pfizer, Inc.	44,603	1,951,827
Roche Holding AG (Switzerland)	7,258	2,366,537
Sanofi (France)	86,889	6,631,393
Takeda Pharmaceutical Co., Ltd. (Japan)	58,800	1,527,164
TerrAscend Corp. (Canada) <i>(NON)</i>	338,100	432,768

56,058,829

Total common stocks (cost \$108,563,156)

\$134,846,572

U.S. TREASURY OBLIGATIONS (0.1%)^(a)

	Principal amount	Value
U.S. Treasury Notes		
2.375%, 2/29/24 ⁽ⁱ⁾	\$40,000	\$39,011
1.625%, 8/15/29 ⁽ⁱ⁾	46,000	39,764
0.625%, 12/31/27 ⁽ⁱ⁾	85,000	71,423
0.375%, 1/31/26 ⁽ⁱ⁾	43,000	37,903
Total U.S. treasury obligations (cost \$188,101)		\$188,101

SHORT-TERM INVESTMENTS (7.0%)^(a)

		Principal amount/ shares	Value
Putnam Cash Collateral Pool, LLC 3.06% ^(AFF)	Shares	5,089,654	\$5,089,654
Putnam Short Term Investment Fund Class P 3.11% ^(AFF)	Shares	4,321,591	4,321,591
U.S. Treasury Bills 2.438%, 10/11/22 ^(SEGSF)		\$200,000	199,891
U.S. Treasury Bills 2.680%, 11/1/22 ^(SEGSF)		100,000	99,785
U.S. Treasury Bills 2.836%, 11/25/22 ^(SEGSF)		100,000	99,586
Total short-term investments (cost \$9,810,460)			\$9,810,507
TOTAL INVESTMENTS			
Total investments (cost \$118,561,717)			\$144,845,180

FORWARD CURRENCY CONTRACTS at 9/30/22 (aggregate face value \$28,416,101) (Unaudited)

Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/ (depreciation)
Bank of America N.A.						
	Danish Krone	Sell	12/21/22	\$1,003,853	\$1,037,999	\$34,146
	Euro	Sell	12/21/22	1,050,622	1,078,190	27,568
	Swiss Franc	Buy	12/21/22	1,631,982	1,676,040	(44,058)
Citibank, N.A.						
	Danish Krone	Sell	12/21/22	1,073,022	1,109,489	36,467
	Swiss Franc	Sell	12/21/22	417,446	413,981	(3,465)
Credit Suisse International						
	Swiss Franc	Buy	12/21/22	2,683,362	2,755,658	(72,296)
Goldman Sachs International						
	British Pound	Sell	12/21/22	477,327	494,820	17,493
	Canadian Dollar	Sell	10/19/22	484,145	517,327	33,182
	Japanese Yen	Buy	11/16/22	2,361,534	2,677,671	(316,137)
HSBC Bank USA, National Association						
	British Pound	Sell	12/21/22	700,341	726,088	25,747
	Danish Krone	Sell	12/21/22	1,900,539	1,957,132	56,593
	Euro	Sell	12/21/22	1,538,217	1,578,848	40,631
	Swiss Franc	Buy	12/21/22	2,645,765	2,716,632	(70,867)
JPMorgan Chase Bank N.A.						
	British Pound	Sell	12/21/22	531,432	550,927	19,495

New Zealand Dollar	Buy	10/19/22	246,035	270,741	(24,706)
Morgan Stanley & Co. International PLC					
British Pound	Buy	12/21/22	369,677	381,294	(11,617)
Japanese Yen	Buy	11/16/22	76,518	127,682	(51,164)
NatWest Markets PLC					
Australian Dollar	Buy	10/19/22	2,314,662	2,457,334	(142,672)
State Street Bank and Trust Co.					
British Pound	Sell	12/21/22	415,509	430,823	15,314
Canadian Dollar	Sell	10/19/22	188,649	201,566	12,917
Euro	Sell	12/21/22	420,742	431,816	11,074
Israeli Shekel	Buy	10/19/22	233,386	237,526	(4,140)
Swiss Franc	Buy	12/21/22	1,620,233	1,664,047	(43,814)
UBS AG					
Danish Krone	Sell	12/21/22	1,164,099	1,203,455	39,356
Swiss Franc	Sell	12/21/22	34,123	33,974	(149)
WestPac Banking Corp.					
British Pound	Sell	12/21/22	1,626,824	1,685,041	58,217
Unrealized appreciation					428,200
Unrealized (depreciation)					(785,085)
Total					\$(356,885)

* The exchange currency for all contracts listed is the United States Dollar.

Key to holding's abbreviations

ADR American Depository Receipts: Represents ownership of foreign securities on deposit with a custodian bank.

Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from January 1, 2021 through September 30, 2022 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Putnam Investments, LLC, references to "ASC 820" represent

Accounting Standards Codification 820 *Fair Value Measurements and Disclosures* and references to "OTC", if any, represent over-the-counter.

(a) Percentages indicated are based on net assets of \$139,326,089.

(NON) This security is non-income-producing.

(AFF) Affiliated company. For investments in Putnam Cash Collateral Pool, LLC and Putnam Short Term Investment Fund, the rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period. Transactions during the period with any company which is under common ownership or control were as follows:

Name of affiliate	Fair value as of 12/31/21	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 9/30/22
Short-term investments					
Putnam Cash Collateral Pool, LLC*	\$—	\$32,956,213	\$27,866,559	\$28,633	\$5,089,654
Putnam Short Term Investment Fund**	3,477,767	33,567,931	32,724,107	29,432	4,321,591
Total Short-term investments	\$3,477,767	\$66,524,144	\$60,590,666	\$58,065	\$9,411,245

* The fund may lend securities, through its agent, to qualified borrowers in order to earn additional income. The loans are collateralized by cash in an amount at least equal to the fair value of the securities loaned. The fair value of securities loaned is determined daily and any additional required collateral is allocated to the fund on the next business day. The remaining maturities of the securities lending transactions are considered overnight and continuous. The risk of borrower default will be borne by the fund's agent; the fund will bear the risk of loss with respect to the investment of the cash collateral. The fund receives cash collateral, which is invested in Putnam Cash Collateral Pool, LLC, a limited liability company managed by an affiliate of Putnam Management. Investments in Putnam Cash Collateral Pool, LLC are valued at its closing net asset value each business day. There are no management fees charged to Putnam Cash Collateral Pool, LLC and there were no realized or unrealized gains or losses during the period.

At the close of the reporting period, the fund received cash collateral of \$5,089,654 for securities loaned. The rate quoted in the security description is the annualized 7-day yield at the close of the reporting period. At the close of the reporting period, the value of securities loaned amounted to \$5,018,436.

** Management fees charged to Putnam Short Term Investment Fund have been waived by Putnam Management. There were no realized or unrealized gains or losses during the period.

(SEGSF) This security, in part or in entirety, was pledged and segregated with the custodian for collateral on certain derivative contracts at the close of the reporting period. Collateral at period end totaled \$362,209.

(f) This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts.

(S) This security is on loan, in part or in entirety, at the close of the reporting period.

Unless otherwise noted, the rates quoted in Short-term investments security descriptions represent the weighted average yield to maturity.

The dates shown on debt obligations are the original maturity dates.

DIVERSIFICATION BY COUNTRY[△]

Distribution of investments by country of risk at the close of the reporting period, excluding collateral received, if any (as a percentage of Portfolio Value):

United States	75.3%
Denmark	7.2
United Kingdom	6.1

France	4.8
Japan	2.8
Ireland	1.8
Switzerland	1.7
Canada	0.3
Total	100.0%

△ Methodology differs from that used for purposes of complying with the fund's policy regarding investments in securities of foreign issuers, as discussed further in the fund's prospectus.

Security valuation: Portfolio securities and other investments are valued using policies and procedures adopted by the Board of Trustees. The Trustees have formed a Pricing Committee to oversee the implementation of these procedures and have delegated responsibility for valuing the fund's assets in accordance with these procedures to Putnam Management. Putnam Management has established an internal Valuation Committee that is responsible for making fair value determinations, evaluating the effectiveness of the pricing policies of the fund and reporting to the Pricing Committee.

Investments for which market quotations are readily available are valued at the last reported sales price on their principal exchange, or official closing price for certain markets, and are classified as Level 1 securities under ASC 820. If no sales are reported, as in the case of some securities that are traded OTC, a security is valued at its last reported bid price and is generally categorized as a Level 2 security.

Investments in open-end investment companies (excluding exchange-traded funds), if any, which can be classified as Level 1 or Level 2 securities, are valued based on their net asset value. The net asset value of such investment companies equals the total value of their assets less their liabilities and divided by the number of their outstanding shares.

Market quotations are not considered to be readily available for certain debt obligations (including short-term investments with remaining maturities of 60 days or less) and other investments; such investments are valued on the basis of valuations furnished by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such services or dealers determine valuations for normal institutional-size trading units of such securities using methods based on market transactions for comparable securities and various relationships, generally recognized by institutional traders, between securities (which consider such factors as security prices, yields, maturities and ratings). These securities will generally be categorized as Level 2.

Many securities markets and exchanges outside the U.S. close prior to the scheduled close of the New York Stock Exchange and therefore the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the scheduled close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value certain foreign equity securities taking into account multiple factors including movements in the U.S. securities markets, currency valuations and comparisons to the valuation of American Depositary Receipts, exchange-traded funds and futures contracts. The foreign equity securities, which would generally be classified as Level 1 securities, will be transferred to Level 2 of the fair value hierarchy when they are valued at fair value. The number of days on which fair value prices will be used will depend on market activity and it is possible that fair value prices will be used by the fund to a significant extent. At the close of the reporting period, fair value pricing was used for certain foreign securities in the portfolio. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Management does not believe accurately reflects the security's fair value, the security will be valued at fair value by Putnam Management in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions.

These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

To assess the continuing appropriateness of fair valuations, the Valuation Committee reviews and affirms the reasonableness of such valuations on a regular basis after considering all relevant information that is reasonably available. Such valuations and procedures are reviewed periodically by the Trustees. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

Forward currency contracts: The fund buys and sells forward currency contracts, which are agreements between two parties to buy and sell currencies at a set price on a future date. These contracts were used to hedge foreign exchange risk.

The U.S. dollar value of forward currency contracts is determined using current forward currency exchange rates supplied by a quotation service. The fair value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in fair value is recorded as an unrealized gain or loss. The fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed when the contract matures or by delivery of the currency. The fund could be exposed to risk if the value of the currency changes unfavorably, if the counterparties to the contracts are unable to meet the terms of their contracts or if the fund is unable to enter into a closing position.

For the fund's average contract amount on forward currency contracts, see the appropriate table at the end of these footnotes.

Master agreements: The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements (Master Agreements) with certain counterparties that govern OTC derivative and foreign exchange contracts entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master Agreements, collateral posted to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, is presented in the fund's portfolio.

Collateral pledged by the fund is segregated by the fund's custodian and identified in the fund's portfolio. Collateral can be in the form of cash or debt securities issued by the U.S. Government or related agencies or other securities as agreed to by the fund and the applicable counterparty. Collateral requirements are determined based on the fund's net position with each counterparty.

Termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term and short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund had a net liability position of \$557,071 on open derivative contracts subject to the Master Agreements. Collateral posted by the fund at period end for these agreements totaled \$362,209 and may include amounts related to unsettled agreements.

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1: Valuations based on quoted prices for identical securities in active markets.

Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3: Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

	Valuation inputs		
Investments in securities:	Level 1	Level 2	Level 3
Common stocks*:			
Health care	\$108,987,500	\$25,859,072	\$—
Total common stocks	108,987,500	25,859,072	—
U.S. treasury obligations	—	188,101	—
Short-term investments	—	9,810,507	—
Totals by level	\$108,987,500	\$35,857,680	\$—

	Valuation inputs		
Other financial instruments:	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$(356,885)	\$—
Totals by level	\$—	\$(356,885)	\$—

* Common stock classifications are presented at the sector level, which may differ from the fund's portfolio presentation.

The volume of activity for the reporting period for any derivative type that was held at the close of the period is listed below and was based on an average of the holdings of that derivative at the end of each fiscal quarter in the reporting period:

Forward currency contracts (contract amount)	\$30,800,000
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For additional information regarding the fund please see the fund's most recent annual or semiannual shareholder report filed on the Securities and Exchange Commission's Web site, www.sec.gov, or visit Putnam's Individual Investor Web site at www.putnaminvestments.com